

[illegible]

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information known by me to be material to patentability as defined in 37 C.F.R. §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>07/787,840</u>	<u>November 5, 1991</u>	<u>Abandoned</u>
(Application Serial No.)	(Filing date)	(Status, patented, pending, abandoned)
<u>07/789,188</u>	<u>November 5, 1991</u>	<u>Abandoned</u>
(Application Serial No.)	(Filing date)	(Status, patented, pending, abandoned)

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

David E. Brook	Registration No. 22,592
James M. Smith	Registration No. 28,043
Leo R. Reynolds	Registration No. 20,884
Richard A. Wise	Registration No. 18,041
Patricia Granahan	Registration No. 32,227
Mary Lou Wakimura	Registration No. 31,804
Thomas O. Hoover	Registration No. 32,470
Alice O. Carroll	Registration No. 33,542

all of Hamilton, Brook, Smith and Reynolds, P.C., Two Militia Drive, Lexington, Massachusetts 02173;


and

Send correspondence to: Patricia Granahan
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
Two Militia Drive, Lexington, Massachusetts 02173
Direct telephone calls to: Patricia Granahan
(617) 861-6240

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole
or first inventor Richard F Selden
Inventor's
Signature *Richard F Selden* Date 013195
Residence 106 Bristol Road
Wellesley, Massachusetts 02181
Citizenship U.S.A.
Post Office Address Same as above

Full name of second joint inventor, if any Douglas Treco
Second Inventor's Signature [Signature] Date 2/3/95
Residence 87 Brantwood Road
Arlington, Massachusetts 02174
Citizenship U.S.A.
Post Office Address Same as above

Full name of third joint inventor, if any Michael W. Heartlein
Third Inventor's Signature  Date 2/2/95
Residence 167 Reed Farm Road
Boxborough, Massachusetts 01719
Citizenship U.S.A.
Post Office Address Same as above

Full name of fourth joint
inventor, if any _____
Fourth Inventor's
Signature _____ Date _____
Residence _____

Citizenship _____
Post Office Address _____

[illegible]

Richard F Selden, Douglas Treco

Applicant or Patentee: and Michael W. Heartlein Attorney's

Serial or Patent No.: 07/911,533 Docket No.: TKT91-01A

Filed or Issued: July 10, 1992

For: IN VIVO PRODUCTION AND DELIVERY OF ERYTHROPOIETIN OR
INSULINOTROPIN FOR GENE THERAPY

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(c) - SMALL BUSINESS CONCERN

COPY

I hereby declare that I am

☐ the owner of the small business concern identified below:

☒ an official of the small business concern empowered to act on behalf
of the concern identified below:

NAME OF CONCERN Transkaryotic Therapies, Inc.

ADDRESS OF CONCERN 195 Albany Street

Cambridge, MA 02115

I hereby declare that the above identified small business concern qualifies
as a small business concern as defined in 13 CFR 121.12, and reproduced in
37 CFR 1.9(d), for purposes of paying reduced fees to the United States
Patent and Trademark Office, in that the number of employees of the
concern, including those of its affiliates, does not exceed 500 persons.
For purposes of this statement, (1) the number of employees of the business
concern is the average over the previous fiscal year of the concern of the
persons employed on a full-time, part-time or temporary basis during each
of the pay periods of the fiscal year, and (2) concerns are affiliates of
each other when either, directly or indirectly, one concern controls or has
the power to control the other, or a third party or parties controls or has
the power to control both.

I hereby declare that rights under contract or law have been conveyed to
and remain with the small business concern identified above with regard to
the invention, entitled IN VIVO PRODUCTION AND DELIVERY OF ERYTHROPOIETIN OR
INSULINOTROPIN FOR GENE THERAPY

by inventor(s) Richard F selden, Douglas Treco and

Michael W. Heartlein

described in

☐ the specification filed herewith

☒ application serial no. 07/911,533, filed July 10, 1992

☐ patent no. _____, issued _____

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e). *NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME _____
ADDRESS _____
[] INDIVIDUAL [] SMALL BUSINESS CONCERN [] NONPROFIT ORGANIZATION

NAME _____
ADDRESS _____
[] INDIVIDUAL [] SMALL BUSINESS CONCERN [] NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Richard F Selden, M.D., Ph.D.
TITLE OF PERSON OTHER THAN OWNER Chairman, Board of Scientific Advisors
ADDRESS OF PERSON SIGNING 195 Albany Street
Cambridge, MA 02115
SIGNATURE *Richard F Selden* DATE 08/19/92

COPY

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

IN VIVO PRODUCTION AND DELIVERY OF ERYTHROPOIETIN OR

INSULINOTROPIN FOR GENE THERAPY

the specification of which (check one)

☐ is attached hereto.

☐ was filed on _____ as
Application Serial No. _____
and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is known by me to be material to patentability as defined in 37 C.F.R. §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority
Claimed

_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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07/787,840	November 5, 1991	Pending
(Application Serial No.)	(Filing date)	(Status, patented, pending, abandoned)
<hr/>		
(Application Serial No.)	(Filing date)	(Status, patented, pending, abandoned)

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

I also hereby grant additional Powers of Attorney to the following attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

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Leo R. Reynolds	Registration No. 20,884
Richard A. Wise	Registration No. 18,041
Patricia Granahan	Registration No. 32,227
Mary Lou Wakimura	Registration No. 31,804
Thomas O. Hoover	Registration No. 32,470
Alice O. Carroll	Registration No. 33,542

all of Hamilton, Brook, Smith and Reynolds, P.C., Two Militia Drive, Lexington, Massachusetts 02173;

and

Send correspondence to: Patricia Granahan, Esq.
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.
Two Militia Drive, Lexington, MA 02173

Direct telephone calls to: Patricia Granahan, Esq.

(617) 861-6240

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Full name of sole
or first inventor Richard F Selden
Inventor's
Signature _____ Date _____
Residence 106 Bristol Road
Wellesley, MA 02181
Citizenship U.S.A.
Post Office Address same as above

Full name of second joint
inventor, if any Douglas Treco
Second Inventor's
Signature _____ Date _____
Residence 87 Brantwood Road
Arlington, MA 02174
Citizenship U.S.A.
Post Office Address same as above

Full name of third joint
inventor, if any Michael W. Heartlein
Third Inventor's
Signature _____ Date _____
Residence 167 Reed Farm Road
Boxborough, MA 01719
Citizenship U.S.A.
Post Office Address same as above

Full name of fourth joint
inventor, if any _____
Fourth Inventor's
Signature _____ Date _____
Residence _____
Citizenship _____
Post Office Address _____

COPY

PATENT
ATTORNEY DOCKET NO. 50010/007001

Certificate of Mailing: Date of Deposit: April 17, 1997

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Matthew G. Doherty
Printed name of person mailing correspondence

[Signature]
Signature of person mailing correspondence

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Richard F Selden et al. Art Unit : 1805
Serial No. : 08/334,455 Examiner : Schwartzman
Filed : November 4, 1994
Title : *IN VIVO* PRODUCTION AND DELIVERY OF ERYTHROPOIETIN
OR INSULINOTROPIN FOR GENE THERAPY

Assistant Commissioner of Patents and Trademarks
Washington, DC 20231

REVOCATION AND NEW POWER OF ATTORNEY

Under 37 CFR §3.73(b) Transkaryotic Therapies, Inc., a corporation, certifies that it is the assignee of 100% of the right, title and interest in the patent application identified above by virtue of:

- ☒ An assignment from the inventors of U.S. Serial No. 07/911,533, of which the patent application identified above is a file wrapper continuation application under 37 CFR §1.62. The assignment was recorded in the Patent and Trademark Office at Reel 6251, Frame 0898 on September 16, 1992.

662090-0272260

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned, whose title is supplied below, is empowered to act on behalf of the assignee.

The undersigned, acting on behalf of the assignee, hereby revokes all powers of attorney previously granted in the above-identified application and appoints:

Paul T. Clark, Reg. No. 30,162
Karen Lech Elbing, Reg. No. 35,238
Clark & Elbing LLP
176 Federal Street
Boston, MA 02110-2214

with full power of substitution and revocation, to prosecute the above-identified application and to transact all business in the United States Patent and Trademark Office connected therewith.


All correspondence regarding the application should be sent to Paul T. Clark, Clark & Elbing LLP, 176 Federal Street, Boston, MA 02110-2214, (617) 428-0200.

660930 OCT 22 2000

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,

Date: 7/11/97


Richard F Selden, M.D., Ph.D.
President and CEO
Transkaryotic Therapies, Inc.

50010.007001.newpoa.wpd

50010.007001.newpoa.wpd